

PRASHCHIKINA, A.S.; GUP'YANOVA, Ye.N.; GRINBERG, A.Ye.

Radical nature of degradation of a number of organosulfur compounds, accelerators of rubber plasticization. Vysokom. soed. 6 no.1:112-117 Ja'64. (MIRA 17:5)

I. Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh izdeliy i Fiziko-khimicheskiy institut imeni Karpova.

S/138/62/000/008/006/007
A051/A126

AUTHORS: Prashchikina, A. S., Grinberg, A. Ye., Makeyeva, A. R., Makarova, I.M.

TITLE: Derivatives of thiobenzoic acid-accelerators of NR mastication

PERIODICAL: Kauchuk i rezina, no. 8, 1962, 17 - 19

TEXT: A study was made of the masticating effect of various thiobenzoic acid derivatives, including dibenzoyldisulfide (DBS) and the cadmium, nickel and lead salts of thiobenzoic acid. Their action was compared to the mastication accelerators renacite IV and peptone 22. The thiobenzoic acid salts were produced similarly to the synthesis of the zinc salt of thiobenzoic acid. All of the investigated salts were shown to accelerate the NR mastication, whereby, with an increase in the concentration of the product, the type of metal included in the salt composition affects the degree of the accelerating action and the nature of the rubber mastication change. The optimum dosage of the salts was found to be about 0.3 w.p. to 100 w.p. of rubber. The cadmium, nickel, zinc salts and renacite IV, when used in optimum quantities, are equivalent to one another and supercede the lead salt in their masticating action of the NR. Dibenzoyldisulfide, on the ✓

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Derivatives of thiobenzoic acid-accelerators of...

S/138/62/000/008/006/007
A051/A126

other hand, shows an increase in masticating action with an increase in the concentration of the product to 3 w.p. When using the investigated accelerators, the minimum destruction rate of the rubber occurs at 70°C, whereby, the temperature change, within the range of 50 - 100°C, has no significant effect on the NR mastication, as opposed to the effect observed without accelerators. The masticating action of dibenzoyldisulfide increases with temperature increase. Thus, the former is considered to be useful in industry as an accelerator of NR high-temperature mastication. It was noted that the introduction of the thiobenzoic acid salts and DBS into non-filled mixes, prepared according to the replacement method with thiuram and captax, have an elevated tendency to scorching. It is suggested that the scorching tendency be reduced or completely eliminated by separate preparation of the NR masticates, introducing softeners, fillers and especially scorching inhibitors. The most effective scorching inhibitor is thought to be trichloro-melamine. The rate of vulcanization and the physico-mechanical properties of the vulcanizates are not affected by the presence of thiobenzoic salts and DBS. The latter is found to be equal to peptone 22 in its masticating action and is easier to produce. There are 5 figures and 1 table.

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh izdeliy
(Scientific Research Institute of Rubber and Latex Articles)

Card 2/2

PRASHCHIKINA, A.S.; GRINEERG, A.Ye.; MAKEYEVA, A.R.

Effect of dibenzoyl sulfide on the tendency of scorching of
mixtures based on natural rubber. Kauch.i rez. 22 no.4:23-24
Ap '63. (MIRA 16:6)

1. Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh
izdeliy.
(Vulcanization) (Benzil)

L 13661-63

EWP(j)/EWT(m)/BDS AFFTC/ASD Pg-4 RM/WW

6/
60

ACCESSION NR: AP3001430 3/0138/63/000/004/0023/0024

AUTHOR: Prashchikina, A. S.; Grinberg, A. Ye.; Makeyeva, A. R.TITLE: The effect of dibenzoylsulfide on the subvulcanization tendency on the basis of natural rubberSOURCE: Kauchuk i rezina, no. 4, 1963, 23-24

TOPIC TAGS: accelerators of plasticizing, vulcanization, subvulcanization, dibenzoylsulfide, thiuram, zinc oxide

ABSTRACT: In view of the marked accelerating effect of dibenzoylsulfide on the plasticizing of natural rubber, the authors felt it worth while to investigate its effect on a standard natural rubber mixture in the presence of accelerators of vulcanization, such as Altax, Captax, DFG, thiuram, and Santocure. It was found that dibenzoylsulfide exerted an enhancing effect on subvulcanization at 90-100°C in the presence of Captax and thiuram, that this effect increased with higher concentrations of dibenzoylsulfide, and that the resulting product became insoluble in benzene. With Altax or Santocure the state of insolubility

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L 13664-63
ACCESSION NR: AP3001430

was reached at only 110-120°C. The authors also studied the effect of dibenzoylsulfide on the process of subvulcanization in the presence of inhibitors of the latter, such as trichloromelamine, phthalic anhydride, and salycilic acid, finding a marked delaying effect on the subvulcanization process. Orig. art. has: 2 charts and 2 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh izdeliy (Scientific Research Institute of Rubber and Latex Goods)

SUBMITTED: 00 DATE ACQ: 30May63 ENCL: 00

SUB CODE: 00 NO REF SOV: 002 OTHER: 000

Card 2/2

PRASHCHIKINA, A.S.; GRINBERG, A.Ye.; MAKEYEVA, A.R.; MAKAROVA, I.M.

Thiobenzoic acid derivatives as accelerators of natural rubber
plasticization. Kauch.i rez. 21 no.8:17-19 Ag '62. (MIRA 16:5)

1. Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh
izdeliy.

(Rubber) (Benzoic acid)

S/081/69/000/022/014/016
A005/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 22, p. 517, # 90727

AUTHORS: Makeyeva, A. R., Prashchikina, A. S.

TITLE: The Properties of the Caoutchouc CKMC-50 (SKMS-50)

PERIODICAL: Tr. N.-i. in-ta resin. i lateksn. izdelyi, 1959, sb. 2, pp. 129-137

TEXT: The properties of the caoutchouc sorts CKMC-50 (SKMS-50) and CKC-50 (SKS-50) were compared. The effect was studied of the mastication, the addition of chalk, kaolin, soot, and plasticizers on the properties of the vulcanized rubber. The caoutchouc SKMS-50 does not differ from the caoutchouc SKS-50 in the main parameters characterizing the technological properties of caoutchouc and its mixture, as well as in the physical-mechanical properties of the vulcanized rubbers.

M. Fishzon

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

S/138/62/000/005/003/010
A051/Ai26

AUTHORS: Makeyeva, A.R.; Prashchikina, N.P.

TITLE: The effect of molecular weight of butyl rubber on the properties of mixes and vulcanizates

PERIODICAL: Kauchuk i rezina, no. 5, 1962, 6 - 8

TEXT: The authors investigated the effect of the molecular weight of butyl rubber on the properties of mixes and vulcanizates and determined the relation between the molecular weight of the butyl rubber found either according to the solution viscosity or according to the viscosity by the Mooney method. A study was made on industrial batches of butyl rubber without Neozone D, intended for use in manufacturing rubber articles for the food industry and medicine. Two major conclusions are drawn from the experiments: 1) With a drop in the molecular weight of the butyl rubber, without Neozone D, to less than $4 \cdot 10^3$, the vulcanization rate of the mixes slows down and the physico-mechanical properties of the vulcanizates deteriorate. 2) With a drop in the molecular weight of the butyl rubber, the viscosity according to Mooney also drops.

Card 1/2

The effect of molecular weight of butyl rubber

S/138/62/000/005/003/010
A051/A126.

ASSOCIATION: Nauchno-issledovatel'skiy Institut rezinovykh i lateksnykh izdeliy
(Scientific Research Institute of Rubber and Latex Articles)

Card 2/2

MAKEYEVA, A.R.; PRASHCHIKIM, N.P.

Effect of the molecular weight of butyl rubber on the properties
of rubber mixtures and vulcanizates. Kauch.i rez. 21 no.5:6-8
My '62.
(MIRA 15:5)

1. Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh
izdeliy.

(Butyl rubber)

A.2520 doc. 9315

S/138/61/000/002/005/008
A051/a129

AUTHORS: Grinberg, A.Ye.; Tsetkov, A.I.; Tal'tseva, Ye.P.; Makeyeva, A.r.;
Peschanskaya R.Ya.; Prashchikina, N.P.; Prashchikina, A.S.; Kryukova, A.B.

TITLE: Furfurhydramide and its vulcanization activity

PERIODICAL: Kauchuk i rezina, no. 2, 1961, 25 - 29

TEXT: The Soviet rubber industry uses diphenylguanidine as a nitrogen-containing accelerator with a basic nature. Its production is based on toxic and inflammable materials (aniline, carbon sulfide, lead silicagels and isopropylalcohol). An attempt was made to find a cheaper nitrogen-containing organic base. Furfurhydramide was tested in combination with sulfur accelerators as an accelerator of vulcanization. A method for producing the furfurhydramide from cheap and accessible raw material was developed. It is an nitrogen-containing organic base which can be used as a vulcanization accelerator in combination with altax, captax or thiram. In mixtures based on natural rubber and a series of synthetic rubbers containing diphenylguanidine in combination with altax or captax, furfurhydramide can be used instead of diphenylguanidine. It increases the durability of the

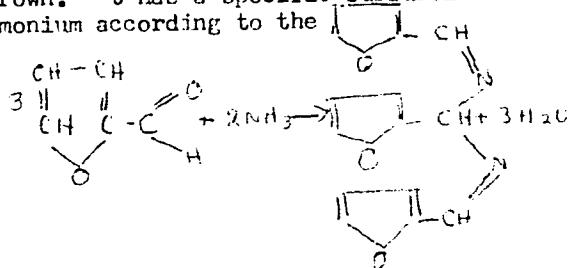
Card 1/3

20809

S/138/61/000/002/005/008

Furfurylhydramide and its vulcanization activity A051/A129

vulcanizes in repeated deformations. When it is used in combination with captax, altax or thiuram in mixtures based on natural and a number of synthetic rubbers, the rate of vulcanization does not change and vulcanizates are obtained with satisfactory technical properties. Its use extends the assortment of vulcanization accelerators and decreases the consumption of captax, altax, diphenylguanidine and thiuram. Its physical and chemical characteristics are: finely crystalline powder of straw-yellow color with d_4^{20} 1.15 - 1.16, melting point when crystallized from ethyl ether 117 - 118°C. It is easily soluble in methyl, ethyl and isopropyl alcohol, acetone, ether, benzene, but is insoluble in water. The molecular heat of combustion at $P = \text{const.}$ is 1, 828.15 cal, at $V = \text{const.}$ it is 1,827.87 cal. Acids decompose it to furfurole and ammonium, when boiled in diluted alkali it is converted to the isomer base furfuran. It absorbs ultraviolet rays, whereby its color changes to a dark brown. It has a specific furfurole odor. It is produced from furfurole and ammonium according to the



20809
S/138/61/000/002/005 /008
.051/A129

Furfurylhydramide and its vulcanization activity

Commercial furfurylhydramide melts at 110 - 115°C. Its nitrogen content is 10.41% calculated and 10.20 - 10.30% found. Obtained data showed that when natural rubber is heated in the presence of furfurylhydramide and sulfur, there is a significant decrease of the plasticity, whereas the plasticity of natural rubber containing only sulfur or furfurylhydramide hardly changes at all when heated under the same conditions. It is concluded that furfurylhydramide strengthens the structuralizing effect of sulfur. It does not affect the inclination of the mixtures to scorching. There are 3 tables, 4 figures and 8 references: 2 Soviet, 4 English and 2 German.

ASSOCIATION: Nauchno-issledovatel'skiy institut resinovych i lateksnykh izdeliy
(Scientific Research Institute of Rubber and Latex Articles)

Card 3/3

PRASHEK, F.

PRASHEK, F.

Who is responsible for interference in radio broadcasts? Radio
no.2:61-63 F '55. (MLRA 8:3)
(Radio in propaganda)

PRASHEK, F.

USSR/ Miscellaneous - Propaganda

Card 1/1 Pub. 89 - 30/32

Authors : Prashek, F.

Title : Who is to blame for radio broadcast interferences

Periodical : Radio 2, 61 - 63, Feb 1955

Abstract : A severe criticism is presented of the deployment of American operated and financed "Radio Free Europe," "Voice of America," and "Rias" broadcasting stations, whose broadcasts are detrimental to the national interest of the USSR and Satellite countries, cause jamming of channels and radio interference, and violate the international agreement on use of radio channels signed by representatives of 25 European countries on 15 March 1950.

Institution:

Submitted:

PRASHKEVICHUS, A.

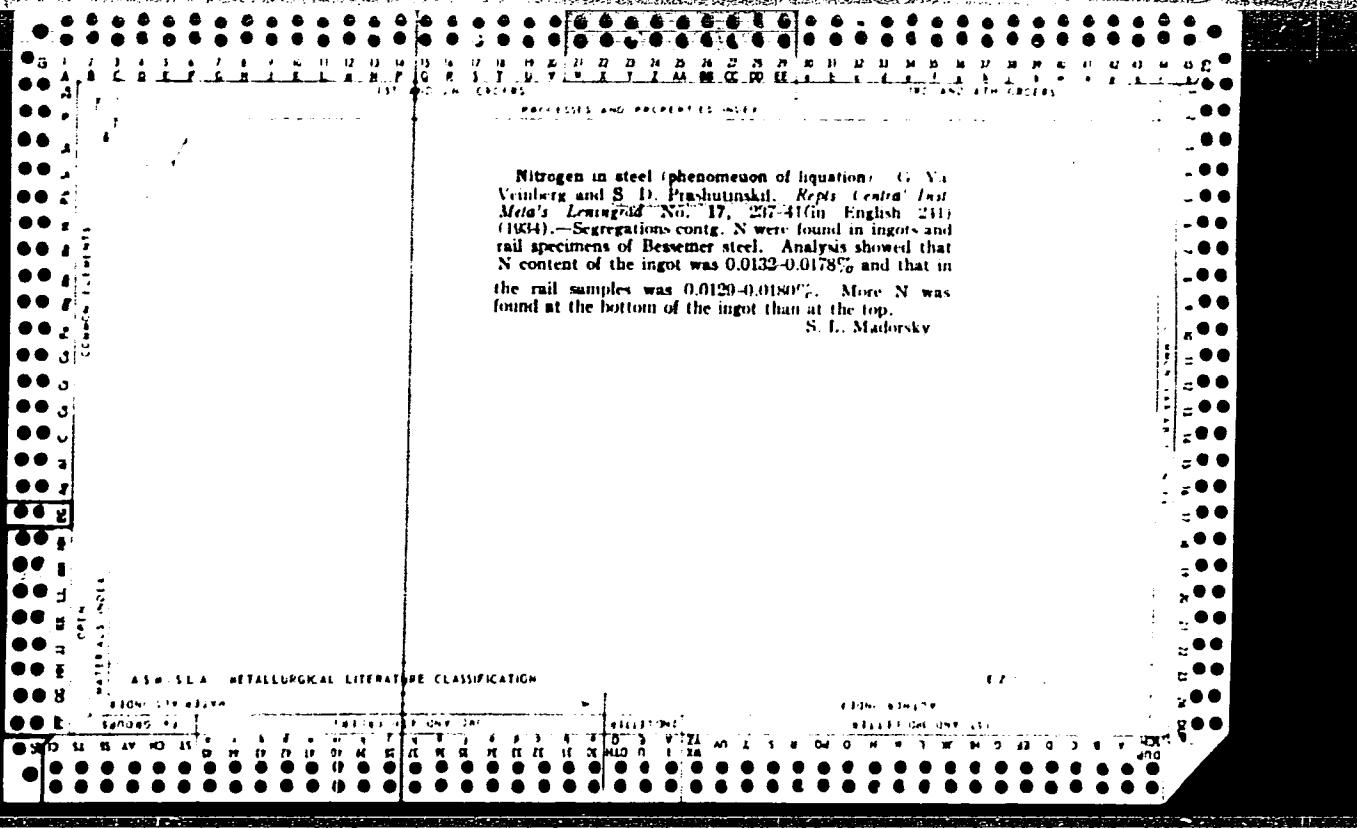
Device for prolonged continuous parenteral administration of liquids
and a method for its utilization in experiments on animals. Izv.AN
Latv.SSR no.12:71-76 '63. (MIRA 17:3)

1. Rizhskiy meditsinskiy institut.

PRASHKOV, L.

Magura, valuable historical monument. Nauka i tekhnika i mladezh no.10:
28-29 '61.

(Cave drawings)



SA
11/22/64

621.313.36

10.5. Commutator windings with irregularly distributed commutator brushes. J. Paulig, Elektrotech Ohz., 30, 85-94 (No. 5, 1940).

The article describes the advantages of using an odd number of energizing points with a regular brush distribution. In order to improve commutation it is proposed to divide the commutating conductors uniformly along the armature circumference, and to achieve the maximum possible number of commutating places. This can be accomplished by choosing an even number of energizing points, the commutator brushes being distributed irregularly and it is also necessary to rearrange the windings accordingly. The solution has been unknown although such a case appeared in a certain position of the brush-gears of the rotor-fed motor (Schrage). The advantages of irregular brush distribution are also explained for this type of motor.

A.

PRAZIL, JL

2

✓ 6003. AN INVESTIGATION ON THREE-PHASE SINGLE-LAYER
WINDINGS? (J.Pražil).

Elektrotech. Obzor, Vol. 47, No. 4, 184-200 (1958). In Czech.

The windings are represented for investigations by special charts, data of the winding being given in suitable squares of the chart. The winding distribution factor, the optimum winding pitch and various forms of windings are discussed. The windings are classified according to the number of slots per pole and phase and the properties of various winding types are described.

N.Klein

BW ✓

PRASTL, J.

Factor of a three-phase double layer winding for even-numbered harmonics. p.1⁵⁰.
(Elektrotechnicky Obzor, Vol. 46, No. 3, Mar. 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

PRASIL, J.

New experiences with three-phase double layer windings. (Supplement) p.T23.
(Elektrotechnicky Obzor, Vol. 46, No. 3, Mar. 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

PRASIL, J.

Extermination of reeds by chemicals in drainage ditches and canals.

P. 28. (VODNI HOSPODARSTVI) (Praha, Czechoslovakia) No. 1, Jan. 1958

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, 1958

Prasil, J.

Determining changes in three-phase double-layer windings for
limiting higher harmonic changes. (Supplement) p. T27
ELEKTROTECHNICKY OBZOR. (Ministerstvo strojirenstvi a Ministerstvo
paliv a energetiky) Praha. Vol. 45, no. 6, June 1956.

Source: EEAL LC Vol. 5, No. 10 Oct. 1956

PRA IL, J.

Square diagram and drawing of schemes for three-phase double-layer windings. (Supplement) p. T19. ELEKTROTECHNICKY OPZOR. Ministerstvo strojirenstvi a Ministerstvo paliv a energetiky Praha. Vol. 44, no. 8, Aug. 1955.

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

CZECHOSLOVAKIA

PRASIL, Jan, MD, Col, ENT Department of Army Hospital (ORL oddeleni Vojenske nemocnice,) Olomouc.

"Prevention of ENT Diseases in the Army."

Prague, Vojenske zdravotnicke listy, Vol 32, No 1, Mar 63; pp 10-14.

Abstract [English summary modified] : General discussion of a number of minor and major common ENT diseases ranging from cold and sinusitis to foreign bodies, aerotitis, mastoid and various other conditions, with special consideration to the effect of the military environment and conditions.

1/1

PRASIL, Jan; HLAVINKA, Frantisek

Plummer-Vinson syndrome (Kelly-Patterson syndrome). Cesk. otolar. 8
no.1:8-14 Feb 59.

1. Pos. nemocnice Olomouc a ORL oddeleni OUNZ Přerov. J. P., Posadkova
nemocnice, Olomouc.

(DEGLUTITION DISORDERS,

Plummer-Vinson synd. (Cz))

621.313.3.046.53
✓ 5302. WINDING FACTOR OF A THREE-PHASE DOUBLE-LAYER WINDING 253. Prag 11

Elektrotech. Obzor, Vol. 45, No. 6, 302-11 (1958). In Czech.

The rectangular grid diagram presented can be used to determine the winding factors of these windings without making a complete winding layout. The suggested method is applied to determine the winding factor of full and fractional coil pitch distributed windings, for windings with unequal phase belts under consecutive poles and for fractional slot windings. The grid diagram facilitates the choice of modifications for the suppression of any of the harmonic components.

E. Erdelyi

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ppm Saay

Prasil, J.

Coefficient of three-phase double-layer winding. p. 302
ELEKTROTECHNICKY OBZOR. (Ministerstvo strojirenstvi a
Ministerstvo paliv a energetiky) Praha. Vol. 45, no. 6,
June 1956.

Source: EEAL LC Vol. 5, No. 10 Oct. 1956

PRASIL, J.

Bar windings and front bar couplings. Supplement p. T39.

Vol. 43, no. 10, Oct. 1954
ELEKTROTECHNICKY OZPOR
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No. 8, August 1956

CZECHOSLOVAKIA

A. OSTADAL, J. CERNOHORSKY and K. FRASIL, Departments of Neurology,
Pathology, and Dermatology, Okres Institute of National Health
(Neurologické oddelení, kozní oddelení a patologickoanatomické oddelení
Okresního Ustavu Narodního Zdraví) Havlickuv Brod.

"Diagnosis of Latent Muscular Sarcoidosis."

Prague, Ceskoslovenska Neurologie, Vol 26(59), No 3, May 63; pp 210-212.

Abstract [English summary modified]: Case report on woman aged 53 who had sarcoidosis, mainly of skin and hand bones and thoracic lymph nodes but also some muscles of lower extremity. Muscular impairment was quite minimal; the typical interstitial changes are described; they correspond to those previously reported by others. Eighteen Western references.

- END -

1/1

2434

CSO: 2000-N

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~~PRASIL K~~ ČASOPIS NAZDCA Sec 15 Vol. 10/10 Chest Diseases Oct 57

2457. SALEK J., ZŽAHOUŘEK V. and PRÁŠIL K. II. Chir. Klin. und Röntgen-abt., II. Chir. Klin. und II. Pathol.-Anat. Inst., Karls Univ., Prag. *Chronische indurative Pneumonie unter dem Bilde eines Lungenkarzinoms.

Chronic indurative pneumonia having the clinical features of pulmonary cancer ZBL. CHIR. 1956, 81/19 (753-772)

In this article on chronic indurative pneumonia, the aetiology, pathology, roentgenology and clinical aspects of this disease are studied on an analysis of 16 personal cases. Attempts are made at establishing a few relative criteria. It is pointed out that this disease, although most frequently affecting the right lung, and predominantly the middle lobe, may occur in any part of the lung. The most frequently established cause in the cases reported, was bronchial stenosis due to enlarged and often calcified lymph nodes. The clinical symptoms are very similar to those of lung cancer, and the majority of the patients were admitted with the diagnosis of cancer. Up to now, there are no exact criteria, apart from the middle lobe syndrome, by which the differential diagnosis between chronic indurative pneumonia and cancer of the lung can be made, so that these 2 diseases may be confused. The authors recommend surgical treatment since the tissue changes in the lung are extensive and may cause severe complications, such as pulmonary abscess, pulmonary gangrene, secondary bronchiectases etc. (IX, 15)

SHALEK, Yan, doktor; ZHAGOUREK, Vatslav, dotsent; PRASHIL, Karel, doktor

Chronic indurative pneumonia simulating pulmonary cancer. Khirurgiia
32 no.4:46-56 Ap '56. (MLRA 9:8)

1. Iz II khirurgicheskoy kliniki (dir. akad. I.Divish), rentgenolo-
gicheskogo otdeleniya etoy kliniki i II Patologoanatomiceskogo
instituta (dir. prof. V.Yedichka) Karlova Universiteta v Prague.

(PNEUMONIA, LOBAR, differential diagnosis,
desquamative pneumonia from cancer (Rus))

(LUNGS, neoplasms,
differ, diag. from desquamative pneumonia (Rus))

PRASIL, Karel

Bronchogenic carcinomas according to autopsy and biopsy findings
at the Second Patho-Anatomical Institute in Prague, 1946-52. Cesk.
onkol. 1 no.1:39-62 1955.

1. II. pathologicko-anatomicky ustav lekarske fakulty Karlovy
university v Praze. Dr. K. Prasil. Havlickuv Brod. nemocnice.
(LUNGS, neoplasms,
bronchogenic, autopsy & biopsy statist.)

KOSTLAN, Jarmil, MUDr.; SOYKA, Oto, MUDr.; PRASIL, Karel, MUDr.

Effect of TS 160 in the treatment of chronic gingivitis and periodontosis. Cas. lek. cesk. 91 no.22:649-651 30 May 52.

1. Z I. stomatologicke kliniky prof. dr. K. Mest'ana, z III. interni kliniky prof. dr. J. Charvata a z II. pathologicko-anatomickeho ustavu prof. dr. V. Jedlicky v Praze.

(NITROGEN MUSTARDS, therapeutic use,
gingivitis & periodontosis)

(PERIODONTIUM, diseases,
ther., nitrogen mustards)

(GINGIVITIS, therapy,
nitrogen mustards)

PRASIL, K.; MICKA, A.V.

Morphological considerations on tuberculosis of the locomotor system. Acta chir. orthop. traum. czech. 26 no.1:15-21 Feb 59.

1. Patologickoanatomicke oddeleni, prednosta dr. Karel Prasil, a oddeleni tuberkulozy a nemoci pohyboveho ustroji, prednost dr. Vilem Micka, OUNZ v Havlickove Brode. K. P. Havlicku Brod.

(TUBERCULOSIS, OSTEOARTICULAR, pathology,
(Cz))

OSTADAL, A.; CERNOHORSKY, J.; PRASIL, K.

Contribution to the diagnosis of latent forms of muscle
sarcoidosis. Cesk. neurol. 26 no.3:210-212 My '63.

1. Neurologické oddelení, kozni oddelení a patologicko-
anatomické oddelení OUNZ v Havlickově Brodě.
(SARCOIDOSIS) (MUSCULAR DISEASES)

KOSTLAN, Jarmil, MUDr.; SOYKA, Oto, MUDr.; PRASIL, Karel, MUDr.

Effect of TS 160 in the treatment of chronic gingivitis and periodontosis. Cas. lek. cesk. 91 no.22:649-651 30 May 52.

1. Z I. stomatologicke kliniky prof. dr. K. Mest'ana, z III. interni kliniky prof. dr. J. Charvata a z II. pathologicko-anatomickeho ustavu prof. dr. V. Jedlicky v Praze.

(NITROGEN MUSTARDS, therapeutic use,
gingivitis & periodontosis)

(PERIODONTIUM, diseases,
ther., nitrogen mustards)

(GINGIVITIS, therapy,
nitrogen mustards)

PRASIL, V.

Interesting experiences with knots made on textile materials. p. 15.

TEXTIL. (Ministerstvo lehkeho prumyslu) Praha, Czechoslovakia. Vol. 1^h, no. 1, January 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11, November 1959.

Uncl.

PRASIL, Vaclav

Welding brass strips with the VUS arg. Ms 3 automatic
welder in the Povazske strojarne works. Zvaranie 12 no.11:
327-331 N'63.

1. Povazske strojarne, n.p.

PRASIL, Slobodan VUKAĆ, Karel; VUKAĆ, Jasminka

Localization of heavy water in Canada - 1985
Jaderná energie č. 11, 1985 N 12

1. Institute of Nuclear Research, Riga near Prague.

L 18110-66 EWT(m)/EWA(h)

ACC NR: AP6010386

SOURCE CODE: CZ/0038/65/nm/n06/0221/0222

AUTHOR: Prasil, ZdenekORG: Nuclear Research Institute, CSAV, Rez (Ustav jaderneho vyzkumu CSAV)TITLE: Contribution to the theory of radiation chemistry. ¹⁹ Part 1. Application of the principles of simplified quasiequilibrium theory of mass spectra to the determination of the radiation chemical yields of radiolysis in the gaseous phase

SOURCE: Jaderna energie, no. 6, 1965, 221-222

TOPIC TAGS: radiation chemistry, mass spectrum, ionization, excited electron state, molecular interaction, radiation effect

ABSTRACT: The spontaneous decomposition of electronically excited molecules and ions, which are produced by the action of radiation, is solved using the principles of simplified quasiequilibrium theory of mass spectra. This decay takes place from the instant of excitation or ionization to the instant of the first bimolecular collisions in the system. The so-called optical approximation is used to estimate the energy distribution of the excited particles. With this method it is possible to calculate the primary radiation chemical yields of the products of radiolysis in the gaseous phase and -- knowing the subsequent chemical reactions -- also the final radiation chemical yields. The limits within which this computational procedure may be applied are discussed. [JPRS]

SUB CODE: 07 / SUEM DATE: none

Card 1/1 Srv

UDC: 539.12.04:541

CZECHOSLOVAKIA

PRASIL, Z

Institute of Nuclear Research, Czechoslovak Academy
of Sciences, Rez near Prague

Prague, Collection of Czechoslovak Chemical Communi-
cations, No 8, August 1966, pp 3252-3262

"On the theory of radiation chemistry. Part 1: Application of principles of the simplified quasi-equilibrium theory of mass spectra to the determination of radiation chemical yields of a gas phase radiolysis."

CZECHOSLOVAKIA

PRASIL, Z

Institute of Nuclear Research, Czechoslovak Academy of Sciences, Rez near Prague

Prague, Collection of Czechoslovak Chemical Communications, No 8, August 1966, pp 3263-3279

"On the theory of radiation chemistry. Part 2: Calculation of relative radiation chemical yields of the gas phase radiolysis of methanol."

L 61532-65 EWT(m) Peb DIAAP

ACCESSION NR: AP5019188

CZ/0038/64/010/011/0408/0408

AUTHOR: Frasil, Zdenek; Vacek, Karel; Bednar, Jaroslav

TITLE: Localization of energy in the radiolysis of solutions. Part 5. Degradation spectrum of electrons, electronic excitation spectra of the molecules, and the primary radiation chemical yield

SOURCE: Jaderna energie, v. 10, no. 11, 1964, 408

TOPIC TAGS: electron, electron spectrum, radiation chemistry

Abstract [authors' English summary]: The number of particles excited in the primary action of electrons was derived as a function of the energy of these electrons (i.e. of the degradation spectrum of the electrons) and of the energy level to which the particles are excited in the interaction. Using the optical approximation it is possible to express the differential cross-section as a function of the oscillator strength of this excitation. This means that the primary

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ACCESSION NR: AP5019188

radiation chemical yield of differently excited particles (electronically excited particles, ions, etc.) depends on the electronic excitation spectrum of these particles. The limited validity of this approximation is discussed. It is shown that some very special properties of the radiolysis of mixtures, which are generally attributed to secondary chemical reactions of the primary products, can be explained by means of the differences in the electronic excitation spectra of the components. Report No 1075/64.

ASSOCIATION: Ustav jaderneho vyzkumu CSAV, Rez (Nuclear Research Institute of
CSAV)

SUBMITTED: 00

ENCL: CO

SUB CODE: NP, OP

NR REF Sov: 000

OTHER: 000

JPRS

alvin
Card 2/2

PRASILOVA, F.; KRYL, R.; ZACEK, K.; VYSOKA, B.; JANDA, J.

Antibody response in children to individual components of polio-myelitis vaccine combined with pertussis vaccine and diphtheria and tetanus anatoxins. Cesk.epidem.mikrob.immun.9 no.5/6:413-420
Jl'60.

1. Ustav ser a ockovacich latek v Praze. -- Katedra epidemiologie
lekarske fakulty hygienicke KU v Praze.
(POLIOMYELITIS immunol)
(WHOOPING COUGH immunol)
(DIPHTHERIA immunol)
(TETANUS immunol)
(VACCINATIONS)
(TOXINS AND ANTITOXINS)

PATERA, V.; PRASLOVA, F.

Comparative studies on Schick's test with serological titration
of diphtherial antitoxin in school children. Cesk.epidem.mikrob.
imun.9 no.5/6:441-443 J1'60.

1. Krajska hyg.-epid. stanice KMW, Praha, Ustav ser a ockovacich
latek v Praze.
(DIPHTHERIA diag)

KRYL, R., Dr.; PRASLOVA, E., Dr.; HALLOVA, D., Dr., Statisticke zpracovani
vysledku provedl Ing.; RADKOVSKY, J.

Serological and clinical comparison of whooping cough vaccines.
Cesk. pediat. 11 no.9:664-669 Sept 56.

1. Klinika infekcnich nemoci v Praze na Bułovce Biogena n. p.
(VACCINES AND VACCINATIONS,
whooping cough vaccines, comparison (Cz))
(WHOOPING COUGH, prev. & control
vaccines, comparison (Cz))

PRASLOVA, F. MALEK, F.

"Schwartzman's phenomenon in the pathogenesis of an abscess in the lungs." p. 679.
(CASOPIS LEKARU CESKYCH, Vol. 92, #25, June 1953, Czechoslovakia)

SO: Monthly List of Russian Accessions, Library of Congress, August 1953, Uncl.
East European Vol. 2 #8

PRASIOVA, FLORIANA

MALEK, Jiri, MUDr; HOUBA, Vaclav, MUDr; PRASIOVA, Floriana; SLAVIK, Rudolf

Effect of narcotic sleep on infection and bacterial intoxication.
Cesk. hyg. epidem. mikrob. 2 no.3:210-224 June '53.

1. Z vyzkumneho strediska Biogeny n.p., Praha XII.
(DIPHTHERIA, experimental,
eff. of sleep ther.)
(SLEEP, effects,
on exper. diphtheria)

CZECHOSLOVAKIA

PRAŠILOVÁ, J; SATORIE, Z

Institute of Nuclear Chemistry, Bohemian College of
Engineering, Prague - (for both)

Prague, Collection of Czechoslovak Chemical Communi-
cations, No 1, January 1967, pp 322-330

"Dinonylnaphthalinesulfonic acid as a liquid ion ex-
changer."

PRASILOVA, Jarmila

Separation of elements on ion-exchangers in nonaqueous and mixed organic-aqueous and mixed organic-aqueous solvents. Chem listy 58 no. 4:401-416 Ap '64.

i. Department of Nuclear Chemistry, Faculty of Technical and Nuclear Physics, Czech Higher School of Technology, Prague.

IHOTAK, J., PPASTILOVA, M.

Lung inflammations in newborn infants. Czech. pediat. 19
no.9;821-827 3 '64.

1. Detska klinika lekarske fakulty Palackeho University v
Olomouci (prednosta prof. dr. J. Ihotak, a Pat. anat. oddeleni,
nemocnice s poliklinikou v Havi. Brode (vedouci MUDr. K. Frasil).

LHOTAK, J.; PRASILCOVA, M.

Interstitial emphysema and pneumomediastinum in the newborn.
Cesk. pediat. 20 no.3:343-344, Mr '65

I. Universitätskinderklinik, Olomouc.

HERMANSKY, F.; HERMANSKA, A.; PRASILLOVA, O.; KASTILLOVA, B.

On the behavior of coagulation inhibitors in chronic hepatopathies.
Cas. lek. cesk. 103 no.45:1237-1241 6 N '64.

1. Laborator pro patofyziologii krvetvorby a jater pri I. interni
klinice fakulty vseobecneho lekarstvi Karlovy University v Praze,
(prednosta prof. dr. V. Hoenig) a Ustredni hematologicke laboratoare
fakultni nemocnice v Praze 2 (vedouci MUDr. M. Suchan).

KOLAR, O.; PRASLOVA, T.; BOJIBRAVA, O.; BARRAGAN, M.

Subacute sclerotizing leukoencephalitis in the course of
Sabin's poliovaccination. Cesk. neurol. 27 no.5:346-348
S '64.

1. Neurologicka klinika lekarske fakulty Palackeho University
v Olomouci (prednosta prof. dr. J. Hrbek, DrSc.) a Ustav
patologicke anatomie lekarske fakulty Palackeho University
v Olomouci (prednosta doc. dr. V. Valach).

U-26

COUNTRY : Czechoslovakia
CITY/STATE :
ARS. JOHN. : RZKhim., No. 21 1959, No. 96647
AUTHOR : Veliky, I., Kostrub, J., and Prastivkova, A.
INSTIT. : Not given
TITLE : Experimental Data on a New Process for the Pres-
ervation of Eggs
ORG. PUBL. : Prumysl Potraviny, v, No 10, 526-529 (1959)
ABSTRACT : The results from preliminary experiments on the
preservation of eggs by the coating of shells
with a thin film of preserving paste (composi-
tion not given) are described. An insignificant
decrease in the weight of the eggs and an in-
crease in the size of the air cell are observed
after storage for 6 months at a temperature of
15-42° and a relative humidity of 50-75%. The
quality of the eggs met the requirements of the
standard. A control batch of untreated eggs was

CARD: 1/2

295

COUNTRY : Czechoslovakia
CATEGORY :

ABD. LOCN. : MHD, No. 21 LSS, No.

26643

TIME :
DATE :
PERIOD :

ORT. PUB. :

ANALYST : Found to be inedible after a short storage time.
T. Svarova

C.R.P.: 3/2

PRASIVKOVA, A.

TECHNOLOGY

PERIODICALS: PRUMYSL POTRAVIN Vol. 9, no. 10, Oct. 1958

VELIKY, I.: KOSTRUB, J.: PRASIVKOVA, A. Experiments with a new method
of preserving eggs. p. 526.

Monthly List of East European Accessions (EEAI) LC Vol. 8, no. 5
May 1959, Unclass.

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001342830005-5

PRASKAC, L.

I. R. TRNKA, Sbornik Ceske Akad. Zemeljske 17, 221-30, 1042

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001342830005-5"

S/0032/64/030/004/0501/0502

ACCESSION NR: AP4033622.

AUTHORS: Shakhtin, D. M.; Levintovich, E. V.; Prasko, V. S.; Alekhin, A. I.; Lerner, A. I.; Kulik, A. I.; Zheltobryukh, V. P.; Vashchenko, V. P.

TITLE: Apparatus for determining the density of glass beams by gamma ray absorption

SOURCE: Zavodskaya laboratoriya, v. 30, no. 4, 1964, 501-502

TOPIC TAGS: measuring apparatus, glass property, density measurement, gamma ray absorption

ABSTRACT: Apparatus is described for the nondestructive measurement of the density of glass beams by measuring the attenuation of gamma rays passing through the material. The source of gamma rays is Co⁶⁰ with an activity of 20 mg-equiv of radium shielded by 20 cm of lead. The detector is a scintillation counter with a 40 x 40 mm NaI crystal. The density of products 250-350 mm thick can be determined within 0.01 gm/cm³ in 3-4 minutes. Orig. art. has: 1 diagram.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov i Chasov-Yarskiy kombinat ogneupornikh izdeliy (Ukrainian Scientific Research Institute of Refractory Materials and Chasov-Yarskiy Combine of Refractory Products)

SUBMITTED: 00

DATE ACQ: 28Apr64

ENCL: 00

SUB CODE: MT

NO REF Sov: 000

OTHER: 000

Card 1/1

RIEDL, Rudolf, prof., dr., inz.; BRYCHTA, Miroslav, inz.; PRASKOVA, Dagmar, inz.

Regeneration of saturated active carbon (used for the adsorption of hydrogen sulphide from pressure gas) by toluene and xylene. Sbor pal vod VSChT no.3, part 1:5-34 '59.

1. Katedra koksarenstvi a plynarenstvi Vysoke skoly chemicko-technologicke, Praha.

SHAKHTIN, D.M.; LEVINTOVICH, E.V.; PRASKO, V.S.; AL'FVIN, A.I.;
LERNER, A.I. KULIK, A.I.; ZHELTOBRYUKH, V.P.; VASHCHENKO, V.P.

Apparatus for determining the density of a glass bar from the
absorption of gamma radiation. Zav.lab. 30 no.4:501-502 '64.
(MIRA 17:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporev i
Chasov-Yarskiy kombinat ogneupornykh izdeliy.

POLAND/Chemical Technology - Chemical Products and Their
Applications - Ceramics, Glass, Bonding
Materials. Cements.

II.

Abs Jour : Ref Zhur - Khimiya, No 11, 1958, 37085

Author : Praskowski, A.

Inst : -

Title : Effects of Clay's Grain Structure on Cement-Clay Mix
Strength.

Orig Pub : Inz-ia i Budown. 1957, 14, No 9, 335-336

Abstract : Based on experiments with cement-soil and cement-clay
mixtures the author concludes that the predominant fac-
tor affecting mixture stability is that of the loose
soil fraction (< 0.002 mm) determined by an arcometer,
rather than that of clay's "richness" as characterized
by specific weight.

Card 1/1

CZECHOSLOVAKIA/Pharmacology and Toxicology. Toxicology.

V

Abs Jour: Ref Zhur-Biol., No 19, 1958, 90054.

Author : Praslicka

Last :

Title : Effect of Psychoton on the Protective Anti-Radiation Action of Hypoxia Produced by Lowering of Pressure in Irradiation of mice.

Orig Pub: Ceskol. biol., 1957, 6, No 5, 356-364.

Abstract: The protective action of hypoxia began only at a partial O₂ pressure of about 40 mm of Hg. This limit could be shifted proportionally by doses of psychoton (phenamine) (I) up to normal O₂ pressure. The protective action of I was manifested more strongly in males than in females. Under conditions of normal

Card : 1/2

v-53

CHECHOSLOVAKIA/Pharmacology and Toxicology. Toxicology.

V

Abs Jour: Ref Zhur-Biol , No 19, 1958, 90054

O₂ pressure, I showed moderate protective action
only in males, and this only with higher doses of
I. -- From author's resume.

Card : 2/2

COUNTRY : Czechoslovakia
CATEGORY : Human and Animal Physiology, Physical Factors
T
ABC. JOUR. : RZ Biol., No. 5 1959, No. 22595
AUTHOR : Praslicka, J.
INST. :
TITLE : The Effect of Illuminating Gas Intoxication and
Cysteine on the Effect of Radiation.
ORIG. PUB. : Ceskoslov. biol., 1957, 6, No. 3, 170--177
ABSTRACT : Mice and rats were intoxicated with illuminating gas (1% to 14% CO, 6 to 8% CO₂, 46 to 55% H₂, 18 to 26% CH₄, 0.5 to 7% O₂) for a period of 10 minutes prior to X-irradiation. At doses of 700 to 1500 r 22.3% of the animals survived (100% of the control group perished). Using the gas in concentrations of 3 to 8% at the moment of irradiation gave a greater protective effect, elevating the DL₁₀₀ for mice to 1500 r. The protective effect depended on the concentration of carboxyhemoglobin in the blood, and failed to 1/2

Card:

T

COUNTRY : Czechoslovakia

CITY/COUNTRY :

JOURN. : RZhBiol., №. 5 1959, №. 22595

NUMBER :

TYPE :

ORIG. PUB. :

ABSTRACT : appear when the concentration was less than 50%. Cysteine, given 30 minutes prior to irradiation (cf mice) with a dose of 700 r, gave a survival rate of 70 to 80%. The combination of cysteine (1.5 mg) and intoxication with illuminating gas protected mice at doses of 1600 r (30% survival). An anoxic mechanism is suggested for the protective effect of the substances tested.--L.F.Semenov

Card:

2/2

T-122

CABADAJ, S. & PRASLICKA, M.

Resistance to lethal roentgen irradiations by the interaction
of blood sera with a culture of *Paramecium caudatum*. Cas. lek.
cesk. 103 no. 18:502 2 My'64

1. Katedra biologie UPJS [University P.J.Safarika] v Kosiciach,
(vedouci: doc. dr. M. Praslicka, GS).
.....

CZECHOSLOVAKIA / Human and Animal Physiology. Effect of Physical T-13
Factors.

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 397⁴

Author : Praslichka, M.

Inst : Not given

Title : The Increase of the Defensive Action of Hypoxia Against
Irradiation By Means of Cysteine and Benzedrine

Orig Pub : Folia Biol. (Ceskosl.), 1957, 3, No 5, 271-281

Abstract : Thrice, prior to irradiation, rats and mice were placed
into an atmosphere of illuminating gas (IG) before
carboxyhemoglobin (C) formation in blood in the amount
of 50% which decreased by 10% the mortality of irradiation
of mice in a dose of 800 r - (DL 100/30). Irradiation
in an atmosphere of IG, after preliminary preparation
of mice with it, increased their minimal lethal dose from
700 to 1500 r at the expense of a greater formation of C

Card 1/3

129

CZECHOSLOVAKIA / Human and Animal Physiology. Effect of Physical Factors. T-13

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 3974

(60% and higher). Additional introduction into the abdominal cavity of mice of 12 - 20 mg por 10 k of cysteine 15 - 20 min. before irradiation increased the minimal lethal dose by 200 r as compared with the same by IG action only. The defensivo effect of cysteine should not be ascribed to hypoxia (H), since the latter was induced by IG and depended on the amount of C contained in the blood. With irradiation of mice in a rarified atmosphere, the defensivo effect of H was noted under a drop of pressure less than 400 mm of mercury column; it increased especially sharply below 380 mm, reaching 100% of survival under a pressure of 300 mm. Introduction of phonamine (I) to mice in the amount of 0.2 - 1.5 ng/kg 20 min. before their irradiation with a dose of 700 - 1050 r increased the defensive action of

Card 2/3

CZECHOSLOVAKIA / Human and Animal Physiology. Effect of Physical T-13
Factors.

Abs Jour : Rof Zhur - Biologiya, No 1, 1959, No. 3974

high H stronger in males than in females. In absence
of H the defensive action of I was insignificant. The
defensive action of I the author explains by the expendi-
ture of a considerable quantity of O₂ for its oxidation
which produces H. -- Ye. A. Abaturova

Card 3/3

130

CZ/38-60-1-18/24

AUTHOR: Praslicka, M.TITLE: Conference on "The Effects of Ionized Heat on Human Organism".¹⁹

PERIODICAL: Jaderná Energie, 1960, No. 1, p. 34

TEXT: An all-state conference on "The Effects on Ionized Heat on Human Organism" was held in the Hrebinok Cottage, in the High Tatra Mountains, from October 28-30, 1959, which was attended by representatives from all branches involved in the peaceful use of nuclear energy. This conference, the first of its kind in Czechoslovakia, was convened upon the initiative of the Atomic Energy Commission at the Slovak Council ČSVTS in Bratislava and was prepared in cooperation with the bio-physical section of the Czechoslovak medical association and the Bio-physical Institute in Brno. The purpose of the conference was to deal with the effects of ionized heat on human organism on a community level. The following scientists and their contributions are mentioned: Professor Hercik, from Bio-physical Institute CSAV in Brno - Medical Annex to the Handbook of the International Atomic Energy Commission on Handling of Radioactive Isotopes; Professor Dr. Běhounek - On Elimination of Radioactive Waste on a World-wide Scale. (This article is in Slovak) ¹⁹

Card 1/1

Ph. A. J. et al.

EXCERPTA MEDICA Sec.16 Vol.6/4 Cancer April 58

1.411. *Early cytological changes in the lymphocyte and myeloid components of mouse spleen following X-ray irradiation (Russian text)* PRASLICKA M. and HILL M. *Folia biol. (Praha)* 1957, 3/1 (37-48) Illus. 10

Experiments with X-irradiation (500 r.) were carried out in 208 mice. Some of the mice were anaesthetized before irradiation (ether, ethane, chloral hydrate,

1411

luminal). Besides degeneration of lymphocytes and erythroblasts after X-irradiation, the mouse spleen also shows progressive changes (development of haemocytoblasts, plasma cells and nuclear enlargement); the red pulpa exhibits a 2-stage wave of granulopoiesis and cyclic karyorrhexis of the eosinophil granulocytes. Under the influence of anaesthetics the appearance of these phenomena is retarded, which is interpreted as a change of the neurohumoral reaction due to influence on the CNS.
Extensive English summary.

Brandt -- Berlin

PRASLICHKA, M. [Praslicka, M.]

Field irradiated by gamma rays. Priroda 51 no.3:47-51 Mr
'62. (MLRA 15:3)
1. Universitet Pavla Yozefa Shafarika, Koshtae, Chekhoslovakiya.
(Plants, Effect of gamma rays on)

František M.

TRASLICIA, M.

Influence of gas poisoning and cysteine on the effect of irradiation.

p. 170 (Ceskoslovenska Biologie) Vol. 6, no. 3, June 1957. Praha, Czechoslovakia.

SO: Monthly Index of East European Accessions (EEA) LC, Vol. 7, no. 1, Jan. 1958

L 00284-66 E&G(r)/EWT(1)/FS(v)-3 DD
ACCESSION NR: AP5023865

CZ/0049/64/000/011/0836/0842

AUTHOR: Praslicka, Milan (Praslichka, Milan)(Doctor, Docent, Candidate of sciences)
(Kosice); Karpfel, Zdenek (Brno)

TITLE: Developement of changes in bone marrow after irradiation in mice in the
condition of hypothermia

SOURCE: Biologia, no. 11, 1964, 836-842

TOPIC TAGS: bone marrow, mouse, irradiation, hypothermia, radiation biologic effect

ABSTRACT: The authors studied changes in the bone marrow of mice
irradiated with a dose of 500 r. In animals maintained for 48
hours after irradiation at a body temperature of 22-25°C all the
changes take place more slowly, but in the same direction as the
animals that were not under the condition of hypothermia. In the
relative picture of the myelogram, and in the absolute values of
cellularity the picture of the bone marrow in the mice subjected
to hypothermia is similar after 48 hours, to that of control mice
after 16 hours. Orig. art. has: 5 figures, 3 graphs, 1 table.

Card 1/2

L 00284-66

ACCESSION NR: AP5023865

2:

ASSOCIATION: Praslicka--Katedra biologie Prirodovedeckej fakulty Univerzity Pavla J. Safarika, Kosice (Department of Biology, Faculty of Natural Sciences, University of P. J. Safarik); Karpfel--Biofyzikalny ustav Ceskoslovenskej akademie vied, Brno (Institute of Biophysics, Czechoslovak Academy of Sciences)

SUBMITTED: 06 May 64

ENCL: 00

SUB CODE: LS

NO REF SOV: 001

OTHER: 014

JPRS

Card 2/2

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and Pathological). Effect of Physical Factors. Ionizing Emissions.

T

Abs Jour: Ref Zhur-Piol., No 17, 1958, 80130.

Author : Pruslicka, Milan; Hill, Miroslav.
Inst :

Title : The Influence of Different Forms of Narcosis on the Development of Early Histological Changes in the Spleen of Mice after X-Ray Exposure.

Orig Pub: Ceskosl. biol., 1957, 6, No 1, 16-22.

Abstract: Histological changes were traced in 208 mice in the spleen during the first 30 hours after x-ray exposure with a dose of 500 r in combination with application of ether, ethanol, chloralhydrate and luminal temporary narcosis, immediately before

Card :1/2

101

EXCERPTA MEDICA Sec 2 Vol 12/7 Physiology July 59

2595. QUANTITATIVE AND QUALITATIVE CHANGES IN SPLENIC MAST CELLS OF IRRADIATED MICE - Quantitative und qualitative Veränderungen der Milz-Mastzellen röntgenbestrahlter Mäuse - Hill M. and Prahlíkka M., Histol-Embryol. Inst., Med. Fak. der Univ. und Biophys. Inst., Tschechoslowakische Akad. der Wissenschaften, Brno - ACTA HAEMAT. (Basel) 1958, 19/4-5 (278-288) Graphs 1 Tables 1 Illus. 10

After total irradiation of mice a massive and rapid differentiation of mast cells from the reticulum cells was noted. Discharge or lysis of the granules followed, with an increase in blood heparin. (II, 5, 14, 16)

L 33656-66

ACC NR: AP6025040

SOURCE CODE: CZ/0049/66/000/001/0003/0009

AUTHOR: Cabadaj, Stanislav--Tsabaday, Stanislav (Graduate biologist; Kosice);
Praslicka, Milan--Praslichka, Milan; Bernasovsky, Ivan--Bernašovský, Ivan
ORG: Institute of Biology, Faculty of Natural Sciences, P. J. Safarik University,
Kosice

TITLE: Interaction of blood sera with a culture of *Paramecium caudatum*. II. Individual sensitivity to medium lethal x-ray doses determined by the consumption of complement by culture of *Paramecium caudatum*

SOURCE: Biologia, no. 1, 1966, 3-9

TOPIC TAGS: protozoology, blood serum, radiation biologic effect, rat

ABSTRACT: The minimum hemolytic dose of complement (MHD) in healthy, not irradiated rats, and the number of NHMD of the complement used up by the culture of paramecia (number of minimum hemolytic doses NHMD) was determined by the consumption of complement by a culture of *Paramecium caudatum*, and by titration of the complement. 2½ hours after an examination, experimental rats were subjected to a dose of 550 r at X-rays and observed for a subsequent period of 30 days. Rats with high NHMD survived longer than those with lower NHMD. Rats with high MHD (low complement level) survived longer than those with a low MHD. Greatest survival rate was found in rats that had a high NHMD and a high MHD. The experiment was carried out with the technical assistance of Helena Krajcarova. Orig. art. has: 3 figures and 2 tables.

Orig. art. in Eng. / PRG: 35,348

SUB CODE: 06 / SUBM DATE: 14Jun65 / ORIG REF: 007 / OTH REF: 003 / SOV REF: 002
Card 1/1

PRASLICKA, M.

"Effect of "psychotone" on the protective influence of the low-pressure hypoxia against irradiation in mice. p. 356"

P. 356 (Ceskoslovenska, Biologie, Vol. 6, no. 5, Oct., 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 7, July 1958

PRASLICKA, M.; KARPEL, Z.; MRAZ, L.

Effect of controlled hypothermia on survival and peripheral blood picture in mice and rats following irradiation. Cesk. fysiol. 7 no.3:284-285 May 58..

1. Ustav biologie lek. fak. v Kosiciach a Ustav biofyziky CSAV, Brno.
(BLOOD CELLS,
count, eff. of hypothermia in irradiated animals (Cz))
(RADIATIONS, eff.
eff. of hypothermia on survival & blood count (Cz))
(HYPOTHERMIA, eff.
on blood count & survival in irradiated animals (Cz))

EXCERPT. MEDICA Sec.5 Vol.11/4 General Pathology Apr 58

1093. EARLY CYTOLOGICAL CHANGES IN THE LYMPHOCYTE AND MYELOID
COMPONENTS OF MOUSE SPLEEN FOLLOWING X-RAY IRRADIATION
(Russian text) - Praslicka M. and Hill M. - FOLIA BIOL. (Praha)
1957, 3/1 (37-48) Illus. 10

Experiments with X-irradiation (500 r.) were carried out in 208 mice. Some of the mice were anaesthetized before irradiation (ether, ethane, chloralhydrate, luminal). Besides degeneration of lymphocytes and erythroblasts after X-irradiation, the mouse spleen also shows progressive changes (development of haemocytoblasts, plasma cells and nuclear enlargement); the red pulpa exhibits a two-stage wave of granulopoiesis and cyclic karyorrhexis of the eosinophil granulocytes. Under the influence of anaesthetics the appearance of these phenomena is retarded, which is interpreted as a change of the neurohumoral reaction due to influence on the central nervous system. Extensive English summary.

Brandt - Berlin (V, 14, 16)

EXCERPTA MEDICA Sec.2 Vol.10/9 Phy.Biochem. Aug. 57

3169. PRASLÍČKA M. and PLEŠKO I. Brno; Bratislava. * Effect of ethanol
on the action of irradiation in mice FOLIA BIOL. (Praha)
1956, 2/2 (121-123) Graphs 4 Tables 1

Intraperitoneal administration of graduated doses of ethanol in albino mice produced a radioprotective effect proportional to the dose when the ethanol was given before irradiation. The conditions used were 630-650 r. of X-rays and 0.4 ml./10-20 g. body weight of 20-25% ethanol solution given 5-20 min. before irradiation. Administration of ethanol 5 min. after irradiation had no protective effect; on the contrary, it shortened the survival time.

Lengerova - Prague (II, 14*)

EXCERPTA MEDICA Sec.2 Vol.10/10 Phy.Biochem. Oct 57
PRASLICKA M.

4588. PRASLICKA M., HELOŇA J., HAVELK A. and ŽIŽKA J. Úst. pro Obecnou
Biol. Lék.Fak. Univ., Brno. "Vliv současného působení růg záterí a některých

4588 CONT.

anestetických a dráždivých látok na mortalitu pulcu. Effects of simultaneous action of X-rays and anaesthetic or stimulating drugs on the mortality of tadpoles ČSL.BIOL. 1956, 5/1 (44-50)
Graphs 9 Tables 1

Tadpoles were irradiated and various drugs in various dosages were added to the water. Ether, chloroform, ethanol, methanol, tribromethanol, urethan and chloral hydrate had a protective action. Small amounts of strychnine enhanced the radiation effect; larger amounts had a protective action.

Rasková - Prague (II, 14)

Prastek KA, EXCERPTA MEDICA Sec 16 Vol. 5/10 Cancer Oct 57

3712. HÍLL M. and PRASLICKA M. Histol. Embryol. Ústav. Lék. Fak. Univ., Brno. Časné cytologické změny lymfocytární a myeloidní složky myši sleziny po ozáření roentgenem *Early histological changes in the lymphocytic and myeloid elements in the spleen of mice submitted to X-ray treatment* Čsl. Biol. 1957, 6/1 (6-15) Tables 1 Illus. 16

Histological examination of the spleen in mice submitted to a single irradiation of 500 r. showed, in addition to the findings so far reported in the radiological literature, differentiation of the reticulum into stem cell types, an enlargement of nuclear volume, expansion of the lymphocytic plasma and formation of immature plasma cells. The red pulp of the spleen contained a biphasic granulopoietic wave and cyclic karyorrhexis of the eosinophile granulocytes. Absorption of cellular fragments was predominantly extracellular. Post-irradiation changes showed, excepting lymphocyte and erythrocyte disintegration, alternation of productive and inactive or regressive stages. The correlations between these findings and the neurohumoral reaction of the organism to irradiation are discussed.

PRASILČEK, M. ; HILL, A.

"Early cytological changes in the lymphocyte and myeloid components of mouse spleen following X-ray irradiation. In Russian."

p. 37 (Folia biologica, Vol. 3, no. 1, 1957, Praha, Czechoslovakia.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 6 June 1958.

PRASLICKA M

EXCEPPTA MEDICA Sec 1/4 Vol 13/7 Radiology July 59

1284. QUANTITATIVE AND QUALITATIVE CHANGES IN SPLENIC MAST CELLS
OF IRRADIATED MICE - Quantitative und qualitative Veränderungen der
Milz-Mastzellen röntgenbestrahlter Mäuse - Hill M. and Praslicka M.
Histol-Embryol. Inst., Med. Fak., Univ. und Biophys. Inst., Tschecho-
slowakische Akad. der Wissenschaften, Brno - ACTA HAEMAT. (Basel) 1958,
19/4-5 (278-288) Graphs 1 Tables 1 Illus. 10
After total irradiation of mice a massive and rapid differentiation of mast cells
from the reticulum cells was noted. Discharge or lysis of the granules followed,
(II, 5, 14, 16)

EXCERPTA MEDICA Sec.14 Vol.11/10 Radiology Oct 57

1721. PRASLICKA M., HELONA J., HAVELK A. and ZIJKA J. Úst. pro Obecnou Biol. Lék. Fak. Univ., Brno. *Vliv současného použití rtg záření a některých anestetických a dráždivých látek na mortalitu pulcu. Effects of simultaneous action of X-rays and anaesthetic or stimulating drugs on the mortality of tadpoles CSL.BIOL. 1956, 5/1 (44-50) Graphs 9 Tables 1.

Tadpoles were irradiated and various drugs in various dosages were added to the water. Ether, chloroform, ethanol, methanol, tribromethanol, urethan and chloral hydrate had a protective action. Small amounts of strychnine enhanced the radiation effect; larger amounts had a protective action. Rasková - Prague (II, 14)

... (Continued)

... P. 5, n. 1, 1945c
... (Continued)

P. 5, n. 1, 1945c

CESKOSLOVENSKA BICIGA

Svedomstvi vydano

... (Continued)

L 60312-65
ACCESSION NR: AP5021084

CZ/0049/64/000/012/0889/0896

13

B

AUTHOR: Cabadaj, Stanislav (Tsabaday, Stanislav) (Graduate biologist) (Kosice);
Praslicka, Milan (Praslichka, Milan) (Doctor, Candidate of sciences, Lecturer)
(Kosice)

TITLE: Interaction of the blood sera with Paramecium caudatum cultures

SOURCE: Biologia, no. 12, 1964, 889-896

TOPIC TAGS: blood, blood serum, experiment animal, protozoology

Abstract [Authors' English summary]: A method of utilizing the complement consumption by Paramecium caudatum cultures in normal fresh sera of man and rats in normal and pathological states is described. In the modification developed by the authors, the method cannot be used for work with mice and guinea pigs. It is not yet certain whether it is applicable for work with dogs, but studies in this direction are continuing. "For providing the human sera we thank cordially to Dr. T. Szabo from the Faculty Transfusion Station in Kosice." Orig. art. has 4 tables.

Card 1/2

L 60312-65

ACCESSION NR: AP 5021084

ASSOCIATION: Department of Biology, Faculty of Medicine of the P. J. Safarik University, Kosice; Radiobiological Department of the Institute for Experimental Biology, Slovak Academy of Sciences, Kosice

SUBMITTED: 05Jun64

ENCL: 00

SUB CODE: LS

NO REF Sov: 000

OTHER: 015

JPRS

Card 2/2

FRASLICKA, Milan; KARPFEN, Zdenek

Development of changes in the bone marrow after irradiation of
mice in a state of hypothermia. Biologia (Bratisl.) 19 no.11
836-842 '64

1. Katedra biologie Prirodovedeckej fakulty Univerzity Karla J.
Safarika v Kosicach a Biophysikalny ustav Ceskoslovenskej akademie
vied v Brne.

GABRIEL, Stanislav - MUDr., Mgr., Milan

Interaction of the blood sera with *Tetrahymena pyriformis* cultures.
I. Complement consumption by *Tetrahymena* cultures in normal
fresh sera. Biologiu (Bratisl.) 19 no.123834-896 '84

I. Cathedra for Biology, Faculty of Medicine of the J.
Safarik University in Kosice, and Radiobiological Department of
the Institute for Experimental Biology, Slovak Academy of
Science in Kosice.

PRASLICKA, M.

Effect of ethanol on irradiated mice. p. 51
Vol 5, no. 1, Jan. 1956
CESKOSLOVENSKA BIOLOGIE
Czechoslovakia

SOURCE: EEAL, Vol 5, no. 7, July 1956